PROGRESS
OF
MEDICAL SCIENCE

SURGERY

UNDER THE CHARGE OF

T. TURNER THOMAS, M.D.,

ASSOCIATE PROFESSOR OF APPLIED ANATOMY AND ASSOCIATE IN SURGERY IN THE UNIVERSITY OF PENNSYLVANIA; SURGEON TO THE PHILADELPHIA GENERAL HOSPITAL AND ASSISTANT SURGEON TO THE UNIVERSITY HOSPITAL.

Volkmann's Ischemic Paralysis and Contracture.—Taylor (*Ann. Surg.*, 1917, lxv, 28) says that experimental work and clinical observation point to traumatic myostitis as the fundamental condition in causing Volkmann's ischemic contracture. The pressure causing the muscle disorganization is both internal and external: internal because the flexor muscles are firmly confined by their envelope of aponeurosis and bone, and external because of tight dressings or the position of acute flexion of the elbow. The degenerated muscle substance is replaced by connective tissue, the contraction of which causes the typical deformity. The damage to the muscle may be very slight, it may be complete, or it may be of any grade between these two extremes, and it is impossible clinically at an early time to determine just how extensive the damage is. Pressure sloughs and abscesses are common on the ulnar side of the wrist and on the flexor prominence just below the elbow. When present these abscesses usually burrow to the deeper structures, heal very slowly and add greatly to the cicatricial rigidity. Nerve injury is purely a complication. It occurs in about 60 per cent. of the cases. It may be primary as the result of the accident, or secondary as the result of the pressure of the swollen muscles, or occur, more frequently, later as the result of cicatricial constriction. The ulnar and median nerves are most often involved and are usually constricted a short distance below the elbow. The prognosis should, as a rule, be unfavorable. Inasmuch as it is impossible to determine clinically the exact amount of damage, an accurate prognosis can not be given until the reaction to proper treatment has been watched for a time. In children from one to fourteen years of age, in injuries about the elbow region, tight dressings should be avoided, as well as extreme flexion of the elbow. All cases should be watched for undue pain, swelling and cyanosis, so that prompt measures may be taken, if necessary, to prevent the full development of the lesion. If in spite of these measures the swelling and cyanosis increase, one should attempt decompression of the flexor muscles by splitting the deep aponeurosis longitudinally, either subcutaneously or together with the skin if that is edematous and shiny. Late operation is done either to lengthen all the tendons of the contracted muscles to permit simultaneous extension of the fingers, hand and wrist to a straight line, or to shorten the bones sufficiently to attain the same result. After an operation has mechanically relieved the deformity, the real work of rehabilitation must be done by a prolonged course of physical therapeutics. Therefore it would seem preferable to avoid the trouble and risk of operation by employing the method of mechanical overstretching of the contractured tissues. This method combined with physical therapeutics obtains results which for promptness and quality are as good or better than those obtained by operation. This may be accomplished by the Jones method of rigid splints or by the method preferred by the author, which may be called the elastic traction method. Persistence in treatment is the only hope of success in the severe cases.

Enterostomy for Ileus.—Doud (*Ann. Surg.*, 1917, lxv, 95) says that the operation of enterostomy is a very old one, at least one hundred and twenty-nine years. It is resorted to now much more frequently than it used to be. The details of the procedure differ with the case. Sometimes, without anesthesia, a little opening is made in a loop of the intestine which presents in the drainage wound; sometimes under local anesthesia, a small abdominal incision, a catheter or small tube, is tied or stitched into an opening in the intestine, and a few Lambert stitches secure the intestine to the abdominal wall; sometimes, under general anesthesia, a search is made for a definite obstruction, and failing to find this, an enterostomy opening is made with careful provision for the subsequent closure of the wound. Sometimes at the termination of a primary operation in unfavorable cases, an enterostomy is done as a safeguard. In all cases the stoma should be as small as will be efficient. Nothing in surgery is more dramatic than the improvement which comes from a fortunate enterostomy. A patient who is almost moribund before the operation is, a few hours later, comfortable, bright, and hungry. The obstruction is frequently temporary. If there are many angulations in a moderately inflamed intestine, the total obstruction may be sufficient to produce stasis. Such obstruction, however, ceases if the distention can be relieved, and if the inflammation subsides. In closing the opening later, Doud loosens the intestine from its adhesions to the abdominal wall, but a very wide exposure of the peritoneum is avoided. Through-and-through stitches invert the edges of the intestinal stoma. Lembert stitches reinforce the suture line, and almost complete closure of the abdominal wall, in layers, has followed. This closure has not been absolutely complete, as provision has always been made for drainage at a little distance from the intestinal sutures. Intestinal resection is a severe operation and is to be avoided when possible.

Fatal Complications of Percy's "Cold Iron" Method in the Treatment of Inoperable Carcinoma of the Cervix. — Leonard and Dayton (*Surg., Gynec., and Obst.*, 1917, xxiv, 156) says the